

1.(amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of and on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of from $\sim 6 \times 10^{19} \text{ cm}^{-3}$ to $\sim [3.75] \underline{1} \times 10^{20} \text{ cm}^{-3}$ and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other.

2. (amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of less than $\sim 3.75 \times 10^{20} \text{ cm}^{-3}$ and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other.

11.(amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor

is formed using a doping wherein said doping has a concentration of greater than $\sim 6 \times 10^{19} \text{ cm}^{-3}$ and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other.

12. (amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a late implant doping technique and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other.

REMARKS

Favorable reconsideration of this application is currently constituted as respectfully requested.

Claims 1, 2, 11 and 12 have been amended claims 1, 2, 11 and 12 remain active in this Application.

Previously presented claims 1, 2, 11 and 12 stand rejected under 35 U.S.C. §102 (b) as being anticipated by *Amemiya et al.* United States Patent 4,210,996. Applicants respectfully